APRIL/MAY 2025

FEL51/CEL51/BEL51 — MICROPROCESSOR AND ITS APPLICATIONS

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List any two 8085 instructions.
2. What is the size of Accumulator in 8085.
3. What is a Time delay?
4. What is the Register pair?
5. What is meant by memory mapping?
6. What is Opcode fetch?
7. What is meant by interrupts?
8. Expand RIM.
9. What are the modes used in display modes?
10. What are the modes of operations used in 8253?

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SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) What are the types of Buses? And explain it.

Or

(b) What is a Register? Explain the registers of 8085.

12. (a) Draw the flow chart for picking up the largest number and explain it.

Or

(b) Write the program of block transfer of data.

13. (a) Draw and explain the timing diagram of Opcode fetch cycle.

Or

(b) Elucidate the interfacing an input port.

14. (a) Elucidate the hardware interrupts.

Or

(b) What is the function performed by RIM instruction? Explain it.

15. (a) Discuss how a traffic lights controller can be interfaced to 8085.

Or

(b) Explain the interfacing D/A convertors with neat diagram.

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SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Write in detail about the Architecture of 8085.

17. Write the program of Ascending/ descending order.

18. What are the type's semiconductor memories? And explain in detail.

19. Explain and draw 8255 programmable peripheral interface architecture.

20. Explain the Internal architecture of 8253/54 with neat diagram.

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